

## DEFENSE NUCLEAR FACILITIES SAFETY BOARD

August 27, 1999

**MEMORANDUM FOR:** G. W. Cunningham, Technical Director

**FROM:** T. Dwyer and H. Waugh, Pantex Site Representatives

**SUBJECT:** Pantex Plant Activity Report for Week Ending August 27, 1999

**DNFSB Activity Summary:** H. Waugh was on site Wednesday through Friday. T. Dwyer was on site all week.

**W56 Dismantlement Program:** The 3<sup>rd</sup> primary of the first group of separated primaries continues to resist further disassembly. This week, 2 different procedures were attempted but failed; a 3<sup>rd</sup> is currently being attempted. The problem is a variation of the stress cushion adherence that was also encountered on the 1<sup>st</sup> unit. All 3 primaries have presented difficulties; all slightly different. Primary-secondary joint separations continue satisfactorily.<sup>[II.B.2.a]</sup>

**AL-R8 Sealed Insert (SI):** Since moving packaging operations to Building 12-99, a total of 5 pits have been processed through all operations. Purge & Backfill station difficulties have been hampering progress -- 3 pits are packaged but in queue for this station. M&H expects to commence full, 2-shift operations with next Monday's graveyard shift. In a separate but related issue, on July 1<sup>st</sup>, LLNL had sent a letter to DOE-AL regarding the slow pace of AL-R8 SI packaging, stating that it would therefore be necessary to implement an accelerated surveillance assessment of some of the oldest pits. Initial discussions concerned surveilling up to 25 pits by the end of August; at present, the Design Agencies have provided 8 pit serial numbers to M&H. Surveillance data [reportedly no adverse findings] have been collected and forwarded.<sup>[II.B.2.b]</sup>

**W79 Dismantlement Program:** The M&H path forward to repair Work Station #1 with parts from #3 was disrupted this week by the discovery that the parts in question were not identical. Fabrication errors, as well as possible design flaws in this equipment, have forced M&H to rework both parts. The W79 Dismantlement Program remains down.<sup>[II.B.2.a]</sup>

**Cell Air Gap Redux:** Last Friday afternoon, M&H suspended all operations in Building 12-44 cells 2-6 based on identification of a potential inadequacy in the Building 12-44 safety analysis [see Occurrence Report ALO-AO-MHSM-1999-0058]. The fact at issue was the leakage of internal cell air outward through the gravel roof structure, as indicated by "ballooning" of the new gulf seal materials being placed on top of the cells during the ongoing roof replacement. M&H Risk Management personnel are still developing the USQD in response to this observation, but were able to cite a SNL study, *Preliminary Assessment of the Radiological Consequences of an Accident Involving High Explosives and Plutonium in a Pantex Assembly Cell*, Appendix M, which concluded that the total respirable aerosol mass released to the environment decreases as more of the accident air volume is released through the gravel roof, as opposed to being forced out through any existing cell air gaps.<sup>[II.B.2.b]</sup>

**Lightning Issues:** Lightning JCO delivery is now expected next Monday.<sup>[II.B.2.b]</sup>